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Prototypes for Targeting America: A Soviet Assessment

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In the wake of the 11 September 2001 terrorist attacks on the United States and the subsequent series of anthrax exposure incidents, U.S. attention to homeland security and force protection has taken on new urgency. The apparent depth of research, planning, and preparation underlying those attacks underscored anew the ways in which a state or nonstate adversary could measure and classify U.S. vulnerabilities and targeting options. But for decades another entity—the Soviet Union—carefully studied the U.S. homeland and its war-supporting resources from a targeting perspective. The H.G. Wells formulation in the *War of the Worlds* that "intellects, vast and cool and un-sympathetic" watched our world as they "slowly and surely made their plans against us" would not have been too far removed from reality, at least in terms of Soviet thoroughness and a decided lack of sympathy.¹ While the Soviets may now seem as remote a threat as Wells' martians, the methods the Soviet Union used and the information it collected may be instructive as the United States considers what new adversaries perceive and what attack options they could consider.

At the beginning of 1989, the profound changes that would shape the international security environment over the next decade were just beginning to take more solid form. The Soviet Union was in the process of withdrawing from its failed 9-year occupation of Afghanistan. At the same time, Soviet troop reductions in Eastern Europe and in the Soviet Union itself were gaining momentum, and fault lines within the Warsaw Pact became more visible. Armed clashes and violent dissent in some constituent republics around the Soviet periphery had moved from being a startling aberration to an enduring security concern for Soviet authorities. Senior members of the Soviet leadership indicated—and Soviet actions seemed to confirm—that every aspect of Soviet

military affairs from tactical force structure to basic planning assumptions about the nature of future war were shifting.

In turn, long-standing Western assumptions about Soviet military policy and capabilities were being challenged from every direction. While few Western analysts at the time thought Soviet goals had changed fundamentally, the posture of the Soviet Union's large, seemingly capable military institution was clearly going to be less overtly aggressive. Consequently, it appeared likely that U.S. and allied requirements for forward-deployed forces—especially in Europe—could shrink substantially in the months and years ahead.

This would have been a positive development from many perspectives, but there was grave concern as well. With more forces stationed on U.S. territory, rapid force projection to distant theaters would become more critical. Force projection would depend even more than in the past on the effective performance of the Continental United States (CONUS) mobilization base. An adversary's successful attack on key CONUS war-supporting infrastructure could disrupt the timely preparation, deployment, and sustainment of military forces and materiel; endanger the achievement of U.S. strategic goals in remote conflict areas; and possibly damage public confidence and resolve.

U.S. Forces Command (FORSCOM) undertook an extensive review of the implications of this changing environment for protecting the homeland. In July 1987, FORSCOM had been officially designated a specified command with a range of operational missions. It also was the Army component of what was then the U.S. Atlantic Command. While command relationships, designations, missions, and roles have changed and evolved over the near decade and a half since then, the clarity of FORS-COM's view in the late 1980s seems particularly timely today.²

FORSCOM commander General Joseph T. Palastra, Jr. designated the land defense of CONUS (LDC) as a top priority. FORSCOM's complementary mission of providing military support for civil defense, central to homeland defense, was a priority as well.³ Brigadier General Glenn D. Walker, FORSCOM J2, and Colonel Robert F. Helms II, Chief, Joint Strategy and Concepts Office, looked at the threat definition and planning implications in early concept papers. Basically, FORSCOM saw a pressing need to accomplish the following:

- Identify and quantify the capabilities of nations and nonstate actors to attack CONUS targets in different scenarios.
- Identify possible targets that hostile forces could attack using a range of capabilities.
- Develop estimates of the impact that target loss or damage would have on supporting the war-fighting commanders in chief.
- Determine the total force requirements necessary to protect these potential targets, including civil authorities' ability to protect these targets from attack and the military forces necessary to augment civil authorities.⁴

To support this effort, FORSCOM began to examine how Soviet planners, using the open sources and direct observations available to the Soviet Union's intelligence staffs, studied the United States' critical infrastructure.⁵ While the Internet was still a relatively undeveloped source of useful data, Soviet intelligence personnel in the General Staff's Main Intelligence Directorate

(GRU) had for years closely studied and systematized U.S. and allied newspapers, journals, and other materials to identify and understand the critical war-supporting assets upon which the United States relied for mobilization, deployment, and war sustainment. The resulting FORSCOM study was intended to illuminate how a potential adversary skilled in assessing military capabilities could identify and use available information to plan for attacks on the CONUS mobilization base. FORSCOM was concerned not only with the Soviet dimension but also with threats from any state or nonstate enemy. The study was based on previously restricted GRU publications, declassified Soviet instructional and concept papers, and other material. The basic findings, set out below, remain relevant as a model of how adversaries can access open sources and integrate acquired information on critical CONUS assets.

Soviet Planning Approaches

For many years, Soviet military writings addressed the CONUS role in global war as well as in regional conflicts.⁶ These assessments, based heavily on open materials and observations, served the Soviet General Staff and other planning bodies by:

- Providing indications and warning intelligence through a continuous review and evaluation of Active and Reserve military forces in CONUS; civil defense preparations and procedures in all their dimensions; activity levels at ports, airfields, and other transportation centers; and activities in the defense industrial sector.⁷
- Evaluating CONUS-based strategic strike forces, mobilization and reinforcement capabilities of general purpose forces, and overall war-supporting potential. These evaluations provided Soviet planners with critical input for formulating their own military readiness criteria, mobilization and reinforcement requirements, sustainability needs, and contingency planning.
- Contributing to the development, refinement, and validation of Soviet targeting plans by identifying key CONUS-based forces and facilities, their roles and capabilities, their interaction, and their vulnerabilities.

Before focusing on Soviet appraisals of war-supporting infrastructure in CONUS, it is necessary to look more generally at how Soviet planners study and assess military theaters and the target sets within them.

Soviet Theaters and CONUS Targeting

In the late 1980s, Soviet military planners divided the world into land, aerospace, and sea areas called "theaters of military action" (TVDs).⁸ These delineated regions were further divided into continental and oceanic TVDs that encompassed friendly, enemy, neutral, and international areas in various combinations. They allowed the Soviet General Staff to assess a host of political, economic, geographic, and military factors associated with conduct of global and regional military operations by all services of the Soviet armed forces. Soviet military planning recognized continental TVDs and their coastal waters located near the Soviet Union; in European and Asian regions; oceanic TVDs such as the Atlantic and Pacific Oceans; and overseas or remote continental TVDs at great distances from the Soviet Union. CONUS fell into this category.



A Soviet Kresta-class cruiser rides at anchor in U.S. waters as an accompanying F-Type submarine approaches from the stern.

As noted, among the many reasons that the Soviets studied and evaluated TVDs was to help them develop individual targets and target complexes whose destruction or disruption would contribute to the successful prosecution of military operations. For all TVDs, Soviet planners classified targets based on their importance to overall strategic objectives; the threat these targets posed to the Soviet Union and its allies; the vulnerability of targets in terms of hardness and mobility; and the priority in which such targets should be attacked.⁹ Targets were grouped by category, the importance of which varied from one TVD to another, and by operational circumstances such as operations with or without the use of nuclear weapons. Among the five basic categories of enemy resources usually considered was one of growing importance: "war-supporting military-economic-political infrastructure."¹⁰

By the mid-1970s, Soviet planners were beginning to focus on future conflicts that could remain nonnuclear for a lengthening period of time. They had begun to formulate warfighting concepts designed to forestall US-NATO nuclear use and successfully achieve European theater objectives without either side employing nuclear weapons. In the Soviet view, the uncertainties associated with nuclear war and the enormous destruction likely to be inflicted on the Soviet Union, the territory of its allies, and deployed Soviet or Warsaw Pact military forces made the military utility of nuclear weapons problematic.¹¹ This concept was eventually embodied in the theater strategic operation (TSO), which was publicly announced in the early 1980s.¹² The goal would be to achieve theater objectives quickly without using nuclear weapons. Nevertheless, Soviet planners judged that the economic and mobilization potential of NATO nations-and especially reinforcements from CONUS-could prolong a future conflict and result in an unfavorable conclusion. Consequently, damage to the U.S. mobilization base became all the more attractive.

Soviet assessments of infrastructure and resources supporting sustained CONUS mobilization grew in importance in the 1980s, both in terms of the time available and the ways in which such mobilization could be disrupted. Soviet research into these matters became more evident in the late 1970s when the restricted GRU military journal, *Foreign Military Review*, became available in the West. Dealing exclusively with Soviet views of foreign military developments and capabilities, this monthly publication included detailed assessments of war-supporting

infrastructure in all TVDs. In 1986, *Foreign Military Review* added a new section to the journal titled "Economics and Infrastructure," within which many such articles were grouped.¹³

CONUS War-Supporting Infrastructure

By the late 1980s, Soviet open writings were replete with assessments of CONUS war-supporting infrastructure and military and civil organizations that supported strategic deployment. These open writings constituted the most general kind of Soviet assessment; closed Soviet analyses addressed the same issues in more detailed, specific requirements. But the open assessments highlighted Soviet perceptions of how U.S. forces prepared for strategic deployment from CONUS; how they exercised; what they mobilized; what manpower and materiel became available; what resources transported and sustained deploying forces; and what military and civil organizations were involved in a direct or coordinating role. Indeed, Soviet writings could have been assembled to largely replicate the discussion of major FORSCOM missions addressed in contemporary Joint Command Readiness Program documents dealing with mobilization and deployment.



Soviet port visits and other official and unofficial stops at or near key infrastructure targets during the Cold War afforded intelligence collectors the opportunity to supplement or refine data gathered from many other sources.

Soviet writings examined the overall structure of the U.S. Armed Forces in virtually every dimension, identifying the major military commands and organizations involved in putting U.S. forces on a wartime footing and the relationships between them.¹⁴ They described in detail the civil assets to be mobilized and the organizations and resources under military control that would be responsible for deploying military forces and materiel abroad.¹⁵ In addition to active duty military units of all services, the U.S. Army Reserve and Army National Guard components received particularly close attention, including their size, organization, training, mobilization, and missions.¹⁶ The Soviets judged that "the primary mission assigned to [U.S. Army] Reserve components during mobilizational deployment of ground forces is the preparation of reserve formations for movement to overseas TVDs and for their participation in ground operations in these theaters."¹⁷ Similarly, U.S. Air Force Reserves were "viewed as the basis of rapid Air Force mobilization during war preparations, of reinforcement of air groupings, and for the replacement of combat losses chiefly in the initial stage of fighting."¹⁸

The evolution, structure, roles, and missions of other organizations in sustaining the wartime continuity of government and services were discussed at length in Soviet military writings. The principal focus was on the Federal Emergency Management Agency, which attracted considerable Soviet interest since its formation in 1979. The role of CONUS military personnel and forces in civil defense and the relationships between military and civil defense entities also received attention.¹⁹

In addition to generating and deploying forces, CONUS was studied as the principal source of weapons, combat equipment, consumable supplies, and certain kinds of raw materials and energy sources, that is, petroleum products. This included materiel and resources stockpiled in CONUS as well as the capacity of U.S. economic enterprises to produce these items. Thus, Soviet sources evaluated and grouped various kinds of defense industrial facilities according to their products: shipbuilding; aviation; ballistic and cruise missile; armor; conventional munitions; chemical weapons; and nuclear munitions.

Collectively, these facilities appeared to the Soviets to constitute those military-economic enterprises that would have been most important in supporting military forces in a future war. Soviet military writings identified U.S. power-energy resources, especially strategic oil reserves, as potential military reserves. Soviet writings also identified some power stations that powered economic enterprises as targets as important as the enterprises themselves.²⁰

As the Soviets explicitly noted, the ability to move military and economic resources within a country and to TVDs was a critical war-supporting function. Consequently, the Soviets evaluated various aspects of U.S. transportation infrastructure with what seemed to be a major emphasis on ports and naval bases. This focus seemed to be in line with Soviet assessments of the relative roles air- and sealift would play in a future major war. U.S. strategic airlift loomed as a major consideration for Soviet planners in moving personnel and limited, high-priority reinforcement operations. Assessments of transportation facilities included ground transportation and a number of airfields, airbases, ports, naval bases, and shipping facilities identified in GRU military writings.²¹

Other military infrastructure elements the Soviets addressed included military-political-administrative control centers, and signal facilities and links, including ground-based radar stations at ballistic missile tracking posts; Strategic Air Command communications facilities; naval land-based communications facilities; and elements of the ground wave emergency network. Overall, a comprehensive list could be compiled based on Soviet open-source military literature alone.

Soviet military writings-both open source and restricted-indicated a sustained, comprehensive analysis of CONUS military and other war-supporting infrastructure according to carefully defined criteria. The Soviets organized this information systematically and considered it in the context of their warfighting concepts and plans. Soviet planners believed that they had an excellent understanding of U.S. capabilities, strengths, and vulnerabilities, and it appears they were correct.

Soviet options for attacking these targets in both massive and incremental ways ranged from strategic nuclear strikes—the least desirable option for reasons noted—to using special operations forces to attack CONUS targets. A wealth of historical and theoretical writings highlighted key transportation centers and nodes, power and energy targets, and signal communications links of various types as particularly desirable targets. Aiding dissident groups and assassinating key military or civilian officials were recognized as valuable tools with Soviet historical precedent. Additionally, a host of psychological and propaganda initiatives subsumed under the term "active measures" may have been employed to influence the perceptions of U.S. leadership, citizenry, and allies or neutrals in the North American TVD.²² Chemical and biological weapons and, according to some former Soviet spokesmen, manpack nuclear systems were all available in the Soviet inventory. While plans for attacking numerous CONUS assets and infrastructure had not become available in the West, target databases were clearly detailed and extensive.

The Soviet Union, of course, dissolved in 1992. Its main successor, Russia, has faced a continuing series of problems that shattered most of the old capabilities and warfighting paradigms. Russia today is in some respects, at least, a partner in addressing common security problems, but the kinds of data Soviet planners used many years ago to evaluate U.S. key infrastructure has proliferated manyfold. Internet resources alone can enable any state or nonstate entity to identify targets and provide an assessment of the impact their destruction or damage would have. This is not just in the warfighting framework used by planners in the Soviet Union, where Soviet research into the vulnerabilities of North American infrastructure supported a specific military strategy. The overall strategies of other state and nonstate adversaries—including current international terrorist networks like al-Qaeda—will be linked to specific goals and objectives.

Terrorists develop target lists, for example, that focus largely on panicking and disorganizing civilian populations, undermining national will, and mobilizing new recruits and supporters. The lists would be shaped by the weapons and access available to the terrorists; however, the logic by which such lists are compiled and the extensive public data upon which they can be based may be similar. In the information age, terrorist organizations do not require general staffs or extensive intelligence organizations to compile target lists and plans. The material is often readily and openly accessible—or with the ease of traveling worldwide—by observing targets covertly or overtly. This is all too apparent in the al-Qaeda manual *Military Studies in the Jihad Against the Tyrants* that sets out approaches and tradecraft associated with target definition and preparation.²³ The manual identifies, for example, the requirement to collect "information about strategic buildings, important establishments, and military bases," including "ministries such as those of Defense and Internal Security, airports, seaports, land border points, embassies, and radio and TV stations."²⁴ The process of studying and systematizing potential targets—based on our understanding of any adversaries' goals, the information available to them, and their past actions—may help to more clearly define specific targets and perceived vulnerabilities. In this respect, Soviet approaches to developing targets may be quite analogous.

The LDC concepts General Palastra and others articulated years ago and the subsequent attention homeland defense received in the 1990s have now been subsumed under the new relationships and structures for homeland security forming in the wake of the 11 September. Balancing the benefits of an open society with effective homeland security in the information age where easy

global mobility and ready access to potentially destructive systems and technologies will clearly challenge U.S. national security planners and those charged with military force protection. In the meantime, the Soviet experience illustrates just how easily targets can be identified and studied.

- 1.In fact, H.G. Wells' 1898 novel describing a martian invasion of Earth purportedly used European pre-World War I General Staffs as the model. General Staffs, as the martians, carefully studied potential adversaries' capabilities, strengths, and weaknesses.
- 2.For a useful discussion of FORSCOM's missions and roles in the late 1980s, see General Joseph T. Palastra, Jr., "The FORSCOM Role in the Joint Arena," *Military Review*, March 1989, 2-9.
- 3.Ibid.
- 4.FORSCOM Chief of Staff Memorandum, "Providing Justification for Military Forces Dedicated to the Land Defense of CONUS," 24 January 1989, concept paper by Colonel Robert F. Helms II, unclassified.
- 5.FORSCOM tasked the U.S. Army Training and Doctrine Command's Foreign Military Studies Office (FMSO) to undertake the study. A parallel FMSO paper, "The Employment of Soviet Special Purpose Forces Against Infrastructure Targets: An Historical Perspective," examined how Soviet special operations forces had been used in past conflicts to attack enemy transportation and other infrastructure.
- 6.There have been numerous opportunities to compare Soviet open-source writings with classified or restricted writings on the same military topics. Soviet open sources accurately address broad concepts and trends while their classified counterparts provide more detail, particularly at operational and strategic levels; include more material on sensitive planning considerations; and, if pertinent, include characteristics of weapon systems and equipment. New developments and concepts often were addressed specifically in open writings sometime after they were addressed in closed forums. Nevertheless, open sources frequently signaled new developments in Soviet military thought.
- 7.Soviet planners termed this process "strategic intelligence" and include a spectrum of military, political, and economic indicators to be collected by various human and technical means. These are set out concisely by Soviet General Staff officer M.I. Cherednichenko under the entry "Strategicheskai razvedka" ("Strategic Reconnaissance") in N.V. Ogarkov, *Sovetskaia voennaia entsiklopedia* (Soviet Military Encyclopedia, hereafter referred to as SVE, Vol. 7 (Moscow: Voenizdat, 1979). For a discussion of some of the military and military-economic aspects of war preparation that are still classified by the Soviets, see the chapters "Combat Readiness of the Armed Forces" and "Strategic Deployment of the Armed Forces" in Ghulem Dastagir Wardak, comp., and Graham Hall Turbiville, Jr., ed., *The Voroshilov Lectures: Materials From the Soviet General Staff Academy*, Vol. 1, Issues of Soviet Military Strategy (Washington, DC: National Defense University Press, 1989); S.A. Bartenev, *Ekonomicheskoe protivoborstvo v voine*

(*Economic Counteroffensive in War*) (Moscow: Voenizdat, 1986). For one contemporary account of Warsaw Pact intelligence-collection efforts against a number of Army, Navy, Air Force, and economic-industrial targets in CONUS, see Desmond Ball, "Soviet Signals Intelligence: Vehicular Systems and Operation," *Intelligence and National Security* (December 1988), 5-27.

8. "Theater of military action" is one of several ways to translate the Russian *teatr voennyykh deistvii* (TVD). These important military-geographic subdivisions were frequently rendered in Western assessments as theater of strategic military action (TSMA) or theater of military operation (TMO) and other formulations. However rendered, they referred to the same Soviet concept.

9. An early informative Soviet discussion of this process is found in Kh. Dzhelaukhov, "The Infliction of Deep Strikes," *Voennaia mysl', Military Thought*, hereafter cited as VM (February 1966), Foreign Press Daily (FPD) 0763/67, 8 August 1967, reprinted in *Selected Readings From Military Thought, 1963-1973*, selected and compiled by Joseph D. Douglas, Jr. and Amoretta M. Hoeber, *Studies in Communist Affairs*, Vol. 5, Part 1 (Washington, DC: U.S. Government Printing Office [GPO], 1982), 106-115.

10. Ibid. While target categories varied somewhat in Soviet writings, generally they included in addition to war-supporting infrastructure: strategic nuclear delivery means and associated command and control; operational and operational-tactical nuclear delivery means such as aviation, missiles, and artillery; groupings of combined arms forces and associated support resources; and air defense forces and their support. The term "military infrastructure," *voennaia infrastruktura* in Russian, was specifically cited in Soviet sources as a foreign term. It was, however, used in Soviet military writings as a useful way to encompass the many kinds of Western military and civil facilities and transportation systems intended or designated for supporting military operations. See, for example, V. Elin and Iu. Korolev, "*Infrastruktura NATO na Evropeiskikh TVD*" ("NATO Infrastructure in the European TVDs") *Zarubezhnoe voennoe obozrenie* (*Foreign Military Review*, hereafter cited as ZVO, July 1988), 68-75.

11. It was stressed, however, that Soviet forces must be prepared to deal with enemy nuclear attack and to launch their own strategic, operational, and tactical nuclear strikes at any time in the course of a NATO-Warsaw Pact conflict.

12. Even in the mid-1970s, the TSO concept had been substantially developed. See "Strategic Operations in a Continental Theater of Strategic Military Action," in Ghulam D. Wardak and Graham H. Turbiville, Jr., *Voroshilov Lectures: Materials From the Soviet General Staff Academy: Issues of Soviet Military Strategy* (Washington, DC: GPO, July 1989), 257-313.

13. Apparently recognizing the value of the journal as a whole to Western analysts, foreign subscriptions were canceled in 1986, although individual issues continued to move westward. Then-classified Soviet assessments indicated that the North American TVD included the contiguous 48 states; Alaska, including the Far Eastern TVD; Canada; Mexico; Central America down to Panama; the West Indies; Greenland; and Iceland, which was also included in the Northwestern TVD. Despite this vast region, "the importance of the North American TVD is determined by the fact that the most powerful imperialist country, the United States of America,

is located there." Soviet evaluations of military-geographic features, military and economic potential, and targeting criteria became more frequent and detailed. Soviet planners specifically took stock of warfighting potential. This included judgments that "half of the industrial and ¾ of the total military output of the Capitalist world is produced in the United States and Canada" and that "the military and economic potential of the United States has decisive importance in the preparation and execution of war by the imperialist camp." Substantial attention was given to past and contemporary power projection capabilities of CONUS-based forces and to the CONUS role as a mobilization and reinforcement base for NATO. Exercises involving mobilization or deployment such as Nifty Nugget and Bright Star were carefully evaluated. In short, by the 1980s, the CONUS mobilization and reinforcement potential emerged as a far larger concern for Soviet planners than it had been in the past. This concern clearly influenced the Soviet study of military infrastructure in CONUS.

14.S. Semenov, "*Tsentral'nye organy tyla sukhoputnykh voisk SShA*" ("Central Rear Service Organs of the Ground Forces"), *ZVO* (December 1986), 19-23; Iu. Omichev, "*Komitet nachal'nikov shtabov Vooruzhennykh Sil SShA*" ("Joint Chiefs of Staff of the U. S. Armed Forces"), *ZVO* (September 1988), 12-16; Iu. Viktorov, "*Vysshie organy upravleniya Vooruzhennymi Silami SShA*" ("Higher Organs of Control of the Armed Forces of the USA"), *ZVO* (September 1985), 7-14; Iu. Omichev, "*Vooruzhennye Sily SShA*" ("Armed Forces of the USA"), *ZVO*, Part 1 (January 1989), 7-10, and Part 2 (February 1989), 7-14; V. Vladomirov, "Organization of Medical Support for the U. S. Army in the Theater of Operations," *ZVO* (November 1985), 18-23, as translated by the Joint Publications Research Service (JPRS), *SOVIET UNION Report: Military Affairs-Foreign Military Review*, JPRS-UMA-86-023.

15.Two of the more recent articles addressing developments in strategic movement are Iu. Omichev, "Armed Forces of the United States," 11-12; V. Grebeshkov, "*Ob'edinennoe komandovanie strategicheskikh perebrosov vooruzhennykh sil SshA*," ("Joint Command for Strategic Movement of the Armed Forces of the USA"), *ZVO* (July 1987), 11.

16.V. Grebeshkov, "*Reservy Voenno-vozhdushnykh sil SShA*" ("Reserves of the Air Forces of the USA"), *ZVO*, Part 1 (June 1987), 31-36, and Part 2 (July 1987), 35-40; I. Aleksandrov, "*Organizovannyi reseryvsukhoputnykh voisk SShA*" ("Organized Reserve of the Ground Troops of the USA"), *ZVO* (February 1988), 21-27; E. Anatol'ev, "*Liudskie resursy SShA i ikh ispol'zovanie v voennykh tseliakh*" ("Manpower Resources of the USA and Their Employment for Military Aims"), *ZVO* (April 1988), 63-68.

17.Aleksandrov, "Organized Reserve," 21.

18.Grebeshkov, "Air Force Reserves," Part 1, 31.

19.I. Mysiuk, "*Vzgliady na grazhdanskuiu obrony v SShA*" ("Views on Civil Defense in the USA"), *ZVO* (September 1988), 70-74; V. Goncharov, "Civil Defense and the U.S. Armed Forces," *ZVO* (May 1984), 20-21, as translated by the JPRS, *SOVIET UNION Report: Military Affairs*; V. Goncharov, "U.S. Civil Defense," *ZVO* (June 1983), as translated in *SOVIET UNION Report: Military Affairs*, JPRS No. 84623.

20.M. Shirokov, "The Question of Influences on the Military and Economic Potential of Warring States," VM (April 1968), FPD 0052/69, 27 May 1969, in Selected Readings, 210-11.

21.Soviet analysts have looked at various aspects of the local defense of air and maritime facilities as in "American Electronic Security Systems for U.S. Air Bases," ZVO (May 1983), 62-71, as translated in *SOVIET UNION Report: Military Affairs*, JPRS No. 84314; V. Mosalev, "U.S. Naval Base Security," ZVO (May 1980), 25-26, as translated in *SOVIET UNION Report: Military Affairs*, JPRS No. 76339.

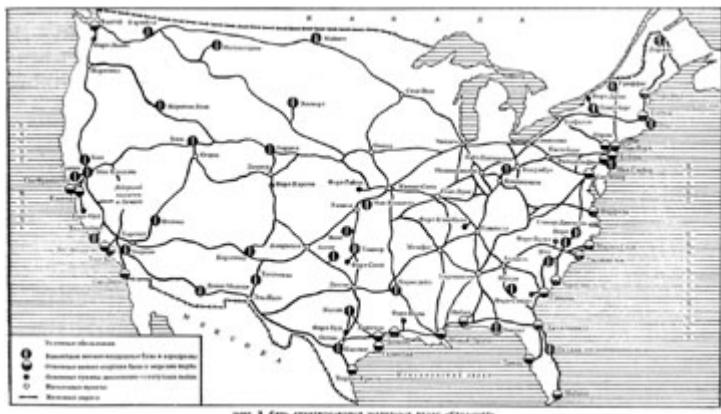
22.For a discussion of Soviet approaches in this regard, see Richard H. Shultz and Roy Godson, *Dezinformatsia: Active Measures in Soviet Strategy* (Washington, DC: Pergamon-Brassey's International Defense Publishers, 1984).

23.See *Military Studies in the Jihad Against the Tyrants* in the "Declaration of Jihad Against the Country's Tyrants Military Series," a document entered in evidence at the trial for the African Embassy bombings, Southern District Court, New York City Attorney General's Office, circa early to mid-1990s, in translation from Arabic. The "Twelfth Lesson" dealing with espionage and information gathering is particularly applicable.

24.Ibid., 47.

War-Supporting Infrastructure Identified by Soviet Planners During the 1980s

A typical example of the Soviets' interest in U.S. resources supporting mobilization, deployment, and war sustainment was their examination of maritime facilities. Soviet analysts noted that there are 10 naval bases; 11 basing points, less diversified naval bases; and 85 commercial ports out of 190 on U.S. territory, including Hawaii, available to support the Navy. Soviet sources note that for some bases and ports this includes reinforcing forward-deployed U.S. force groupings in transoceanic theaters of strategic military action. For example, Norfolk/Hampton Roads naval complex's role as a major departure port under the U.S. Atlantic Command for mobilized forces reinforcing Europe was well recognized and openly discussed. Specific naval bases and basing points along with the principal commercial ports addressed in Soviet sources follow:



The Soviets evaluated and grouped various kinds of defense industrial facilities according to their products: shipbuilding; aviation; ballistic and cruise missile; armor; conventional munitions; chemical weapons; and nuclear munitions.

The **Atlantic region** includes New London, Philadelphia, Norfolk, Little Creek, and Charleston Naval Bases; Boston, Newport, New York, Annapolis, King-Bay, Mayport, Key West, and New Orleans Naval Basing Points; and Staten Island, Pensacola, Pascagoula, Mobile, Gulfport, Violet, Lake Charles, Galveston, and Corpus Christi planned basing points. Soviet sources also include naval bases at Guantanamo Bay, Cuba, and Roosevelt Roads, Puerto Rico, in the North American theater of strategic military action. General purpose and specialized commercial ports are considered particularly important for loading troops, combat equipment, and supplies. Many are assessed as being equipped with special materials handling means and are served by road, rail, and pipeline. They are examined as complexes based on their various facilities and their output in terms of tons over time. The most important general-purpose ports, according to the Soviets, are New York, New Orleans, Philadelphia, Houston, Norfolk, Baltimore, Jacksonville, Boston, Savannah, Portland, Mobile, and Tampa. Specialized ports include Loop (sic), Beaumont, Baton Rouge, and Port Arthur. The most important container terminals and specialized mooring facilities for roll-on/roll-off vessels are located at commercial ports in New York, Baltimore, Charleston, New Orleans, Boston, Galveston, and Philadelphia.

The **Pacific region** includes Coronado, San Diego, San Francisco, Bangor, and Pearl Harbor Naval Bases; Long Beach, Bremerton, Kodiak (for coastal defense), Adak, and Midway (forward) Naval Basing Points; and Treasure Island and Everett planned basing points. The most important general-purpose commercial ports identified, based on these criteria, are Seattle, Tacoma, San Francisco, Oakland, Los Angeles, and Long Beach. Specialized ports include Valdez, El Segundo, and Barbers Point. Commercial ports with container and roll-on/roll-off moorings and facilities include Seattle, Oakland, Long Beach, Los Angeles, Portland, and San Francisco.

The **Great Lakes region** includes commercial ports at Chicago, Duluth-Superior, Detroit, Toledo, Cleveland, and Buffalo are considered general-purpose ports with military utility.

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